EFFICIENCY OF SUPPORT FOR GENERATIONAL RENEWAL IN AGRICULTURE

Marie Šimpachová Pechrová

Abstract

Financial support for young starting farmers is provided within Common Agricultural Policy. It is important to assess the effectiveness of the spent resources which is the aim of this paper. Efficiency is defined as whether the expected output is achieved with given input. The contribution of Complementary Direct Payments (CDP) and of investment support on business plan to generational change in agriculture is measured by the dynamics of the development of the number of applicants for those subsidies compared to the development of the total number of new farmers under 40 years. The most newly registered farmers were in 2015. It seems that the interest of young people in farming increased with the start of the new CAP programming period 2014–2020. The number of applicants for CDP had been increasing every year with exception in 2020. The relation between the number of applicants for investment support and the number of new young farmers is weak. We may conclude that CDP may have helped to some extent to increase the number of new young farmers at the beginning. Investment support on a business plan helped to facilitate the start-up of young farmers, but did not increase their numbers significantly.

Key words: generation renewal, subsidy, young farmers

JEL Code: Q18, J43, J62

Introduction

The inadequate rate of generational turnover in the agriculture puts under risk the survival of the sector. There were only 10.2 % of managers in the age under 40 years in 2016. More or less similar situation is also in other European Union (EU) states. (Šimpachová Pechrová and Šimpach, 2021). Therefore, there are measures taken to enhance the number of young people. Financial support for young starting farmers is provided within Common Agricultural Policy (CAP) in two forms: under the pillar 1 (Complementary Direct Payments – CDP where the direct payments are higher by additional amount for farmers under 40 years), and under pillar 2 – Rural Development Programme (RDP) – in a form of financial support for business plan of

a young starting farmer. RDP covers a period of seven years (there has been three programming periods in the Czech Republic so far: 2000–2006 (respectively from year 2004 when the CR entered the EU), 2007–2013 and 2014–2020 (ongoing). Commission proposals for the CAP post-2013 (that is currently in force) even enhanced the support to help establish new entrants (Davis et al., 2013).

The subsidies are important. RDP for the years 2014–2020 brought almost EUR 3.5 billion (more than 96 billion CZK) to agriculture. Of this, EUR 2.3 billion (62 billion CZK) came from EU sources and EUR 1.2 billion (34 billion CZK) from the Czech budget. Given the volume of subsidies that flow in the support of generational change in agriculture, it is important to assess the effectiveness of the resources spent which is the aim of this paper. Efficiency can be defined as the ratio of inputs and outputs, i.e. whether the expected output (the number of young people in the agricultural sector) is achieved with a given amount of financial resources.

Efficiency, effectiveness and impacts of financial support from the EU has been assessed in many countries from various points of view. Kazakopoulos and Gidarakou (2003) examined to which extent the young farmers' incentives have contributed to the entrance and instalment of young women in farming and to the improvement of their position in the family farm in region of Thessaly, in Central Greece. They found out that for those women "whose entry into farming reflects the choice of a desired way of life, incentives give them the opportunity to strengthen their position on the farm and develop a more substantial role as farm heads," (Kazakopoulos and Gidarakou, 2003).

Bojnec and Fertő (2021) found out that total subsidies and direct payments (Pillar I subsidies) had positive effect on farm employment of paid labour in Hungary and family labour in Slovenia. On the other hand, "rural measures with agri-environmental and less favoured area subsidies, and investment subsidies are particularly important for the family farm labour in Slovenia, but not for the paid labour, neither the family farm labour in Hungary." (Bojnec and Fertő, 2021) Šimpach (2017) assessed how important was the support for young farmers in selected countries of the EU in terms of finances devoted to young farmers compared to the total RDP budget and the share of farmers with support. The best situation was found in Poland, where 5.3% of the RDP budget was allocated for young farmers.

Šimpachová Pechrová and Šimpach (2021) asked young farmers about the incentives that helped them to enter the sector. According to their primary research, young people considered as the most motivating subsidy support in the form of a start-up grant and then of complementary direct payment from the EU. Besides, they emphasized the role of other motivation factors (continuation in family farming etc.).

Šimpachová Pechrová (2017) examined the motivation of young people to enter the agricultural sector and to become a self-employed farmer and also assessed the barriers that makes the entrance to agriculture harder than to other sectors. It was found, based on literature review and discussion with experts, that main problems were the access to land and to credits. "Those barriers are almost insurmountable for complete new entrants. Hence, it is easier to foster generation renewal when the agricultural holding is transferred between generations." (Šimpachová Pechrová, 2017).

As significant amount of funding is spent from the first pillar to support young beginning farmers, it is necessary to examine its effectiveness. The European Court of Auditors (ECA), which audited support from the 1st pillar of the CAP revealed that targeting is of the support is questionable. "The support is not based on a proper needs assessment, does not reflect the general objective of supporting generational renewal, is not always given to young farmers who need it, and is sometimes given to enterprises where young farmers play only a small role." (ECA, 2017) Furthermore, according to the findings of the ECA (2017), Member States do not coordinate payments under pillar 1 with support for young farmers under pillar 2. "Support is provided in a standardized form that does not consider other needs than additional income. The Common Framework for Monitoring and Evaluation does not contain any outcome indicators." (ECA, 2017). So, the measurement of the effects of support on generational renewal is difficult.

On the other hand, the support from the 2nd pillar is better targeted on the needs of young farmers in regard of the access to land, capital and knowledge. The amount of support is usually linked to the needs. Furthermore, support is aimed at more qualified farmers who are committed to implementing a business plan that will lead to building viable businesses. The project selection process often supports the start of farming in disadvantaged areas. However, the quality of business plans varied across EU member states. (ECA, 2017).

According to the Ministry of Agriculture (MoA) (Annual Implementation Report 2020), it is evident from the ongoing implementation of the PRV that this program contributes to the entry of young farmers into the agricultural sector. We tried to examine this issue in our paper.

1 Data and Methods

The contribution of CDP and of investment support from RDP on business plan to generational change in agriculture can be measured by the dynamics of the development of the number of applicants for those subsidies compared to the development of the total number of new farmers under 40 years. Data about the number of applicants for CDP for young farmers were gained

from Annual Report for Direct Payments 2021 (MoA, 2022a) and about applicants for investment subsidy from the Lists of Approved Subsidy Applications under the particular round of the RDP from operation 6.1.1. (MoA, 2022b).

The data about new farmers under 40 years from Register of the Agricultural Entrepreneurs (RAE) were obtained on request from MoA. Publicly available are only statistics of registered farmers in a given year and in a given region regardless the age. We obtained the time series from 2007 to 2018 because more recent data was not available in the same structure. According to the definition an agricultural entrepreneur is "a natural or legal person who intends to do business in agriculture, i.e. who intends to run agricultural production as a continuous and independent activity in his own name, on his own responsibility, in order to achieve profit. (MoA, 2021). Agricultural entrepreneurs are registered in the RAE, regardless of whether they actually carry out their activities. They may terminate or suspend their registration. Hence, active registration does not mean actual performance of the activity. For this reason, the mere numbers of registered agricultural entrepreneurs under the age of 40 do not give a completely accurate picture of the real situation in the field, but we do not have better data.

We compare the development of the number of applicants for those subsidies compared to the development of the total number of new young farmers in the graphs with trend functions. Trend function is an equation where the explained (dependent) variable (number of applicants or of new farmers in our case) is explained by the constant and time.

2 Results

Regarding the contribution of CDP to generational change, only a short time series of the number of this direct payment recipients is available for comparison. As can be seen from fig. 1 below, the most newly registered people were in 2015, which was the largest year-on-year increase of 540%. In 2016, there were significantly more active young farmers than in the previous year. It is possible that the interest of young people under 40 in farming increased with the start of the new programming period 2014–2020.

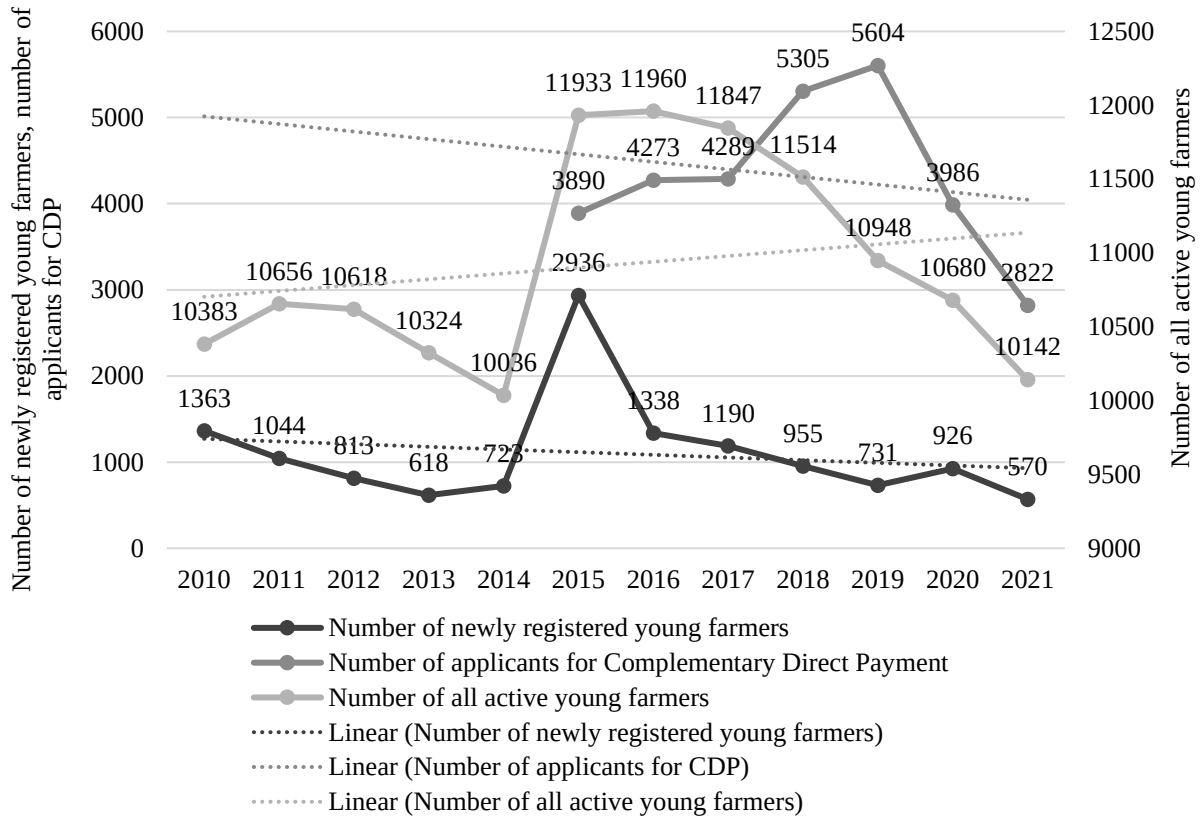
Although the number of active farmers (data always as of 31 December of the given year) increased, the number of newly registered ones began to decrease later. The decrease in the last period was probably due to the fact that the potential of applicants (young people who wanted to enter the industry) has already been exhausted. In addition, starting a 5-year commitment this year (at the end of one programming period) could also carry a certain element of uncertainty, as it was not clear under what conditions payments would continue in the new program period.

Subsidies are therefore likely to be applied for by those who are already actively engaged in agricultural activity (within 2 years of registration), but without support so far.

Regarding the trends throughout the whole period 2010–2021, it can be seen that trend functions are decreasing in case of the number of applicants and number of newly registered farmers. On the other hand, the trend function is increasing for the number of all active young farmers (despite that the number is decreasing since 2015.

The increase in the number of applicants for additional direct payments between 2015 and 2019 is against the trend of slight decrease in the number of newly registered farmers under 40 years of age (or agricultural entrepreneurs registered in the REA) and also against the trend of decrease of total number of active young farmers. But it is difficult to prove a causal link and to confirm that it is the CDP that influence the number of new young farmers.

Fig. 1: Comparison of the number of young farmers registered in the RAE and the number of beneficiaries from the 1st pillar of the CAP (CDP for young farmers)



Source: MoA, Register of the Agricultural Entrepreneurs (RAE) (2021); MoA, Annual Report for Direct Payments 2021 (2022a)

The contribution of the investment subsidy for the start of activity for generational change can be seen in longer time horizon as it takes time before the support reflects in the economic situation of the enterprises. It is also difficult to determine whether subsidies have contributed to generational change.

If we compare the number of approved applications from RDP measures (in the programming period 2007–2013 and 2014–2020) and the number of newly registered young farmers, it can be seen from fig. 2 that the development does not correspond. The number of approved applications for investment subsidies is in the order of hundreds, while the number of newly registered young farmers is in the order of hundreds to thousands and the number of all registered farmers is in the order of tens of thousands. Only the number of all registered young farmers has increasing trend throughout the examined period.

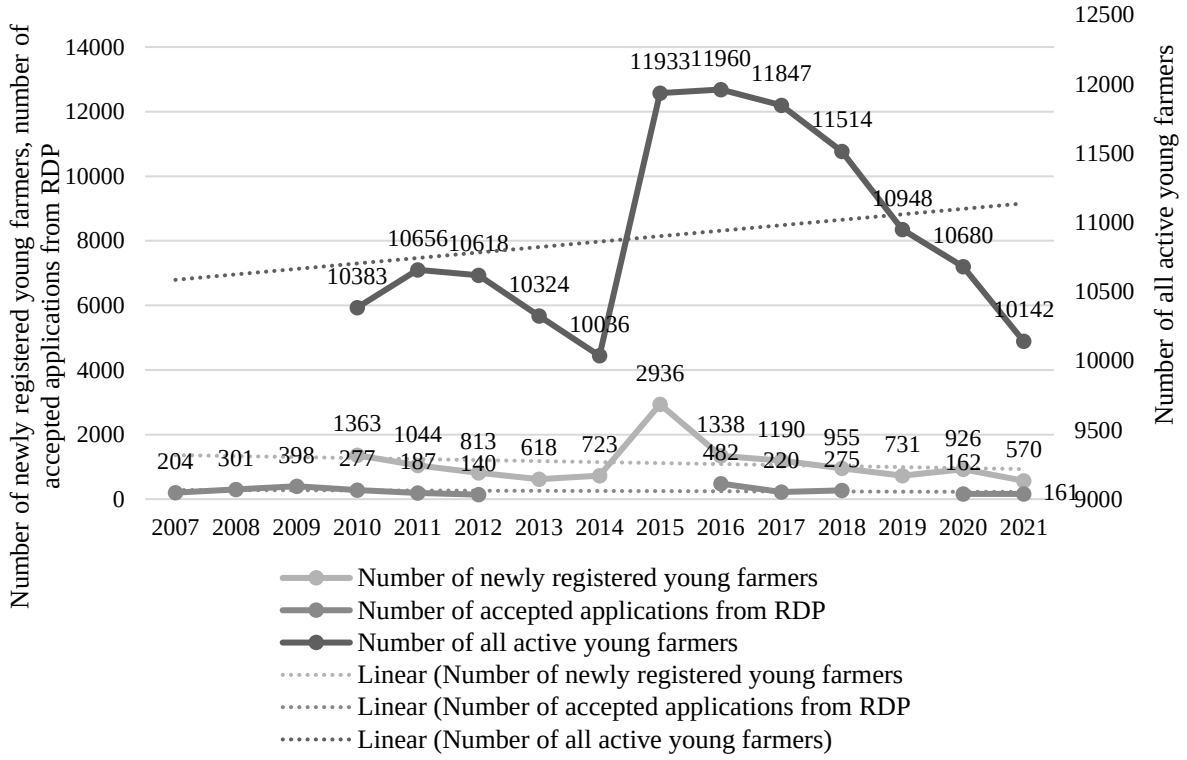
The number of newly registered farmers, as well as the number of all active young farmers, increased sharply in 2015. The number of applicants increased in 2009, which was due to the fact that it was the middle of the program period, when the applicants had already come to terms with the conditions of the subsidy and it was not for them so difficult to submit a grant application, and at the same time there were still enough funds for allocation. In 2012, however, before the end of the program period (in 2013), the funds ran out and the 16th round of receiving applications was thus the last for some time. This was followed by a shortfall in the granting of subsidies between 2013 and 2016, which makes it difficult to analyse the effectiveness of the measure.

In the new programming period, subsidies for young farmers were granted from 2016 to 2021, with the exception of 2019. However, the number of approved applications decreased, as did the number of newly registered young farmers and the number of all young farmers.

As continuity has been broken due to the transition to a new program period, it is not possible to determine the contribution of the measures to generational change. At the same time, it is clear from the nature of the measure that it rather helps to facilitate the start of activities for young beginning farmers who are already motivated to start agricultural activities. The contribution of the measure to increasing the number of young farmers is therefore marginal.

In the mid-term evaluation of the RDP (Ekotoxa and Ireas, 2016) was found out that some of the applicants eventually start their agricultural activity even without receiving a subsidy. However, approximately a quarter of respondents would not implement the project at all, and 21% within two years and 17% within five years. (Ekotoxa and Ireas, 2016).

Fig. 2: Comparison of the number of young farmers registered in the RAE and the number of beneficiaries from the 2nd pillar of the CAP (Rural Development Programme)



Source: MoA, Register of the Agricultural Entrepreneurs (RAE) (2021); MoA, Accepted applications from measures I.3.2 a 6.1.1 Starting a young farmers' business (2021)

Our simple comparison shows that the development of number of recipients of CDP for young farmers or number of accepted applications from RDP does not correspond to the development of the number of new registered or all active young farmers. It would be ideal to examine a counterfactual situation. The number of newly registered young farmers shall be compared under the circumstances when there are subsidies or when there are not which is only possible in a model. In the longer term, the effects of the measures taken must be examined above all. It is necessary to evaluate the use of financial resources primarily from a qualitative point of view, i.e. whether the entry of young farmers into the sector was facilitated.

Conclusion

In addition to the economic effect, the aim of support from the 1st and 2nd pillars is primarily to increase the number of young people doing business in agriculture. Therefore, in the article, we dealt with the contribution of CDP for young farmers and investment subsidies to generational change. The dynamics of the development of the number of applicants and approved subsidies was measured in comparison with the trend of the development of the

number of new young farmers under the age of 40 (total active and newly registered in the Register of agricultural Entrepreneurs AE).

The most newly registered farmers were in 2015, which was the largest year-on-year increase by 540%. Interest of young people under 40 in farming increased with the start of the new CAP programming period 2014–2020. Then the number of newly registered farmers began to decrease. The potential of young people who wanted to enter the sector was probably exhausted. In case of investment support, the relation between the number of applicants for this subsidy and the number of new young farmers is not pronounced.

The number of total active young farmers and newly registered farmers is decreasing since 2015. This can cause the decrease of applicants for CDP and accepted application from RDP. The relation therefore works in both ways – there must be young farmers to get the subsidies, and the subsidies shall help to increase the number of farmers. Also, the number of newly registered young farmers and number of the applicants / recipients of subsidies cannot be only monitored indicators as they do not show the clear picture that was also criticised by ECA. “We have seen little evidence that EU measures make it easier for young farmers to start up and improve generational turnover and the viability of supported enterprises, mainly due to the low quality of indicators under the common monitoring system.” (ECA, 2017)

Based on a simple comparison of the development of the number of farmers and the number of supported projects and the amounts paid out, it is not possible to say whether the support contributed to an increase in the number of young farmers in the sector. We may conclude that CDP may have helped to some extent to increase the number of new young farmers in certain years. On the other hand, investment support on a business plan rather helped to facilitate the start-up of young farmers, but did not increase their numbers significantly.

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References

Bojnec, Š., & Fertő, I. (2022). Do different types of common agricultural policy subsidies promote farm employment? *Land Use Policy*, 112, 105823. https://doi.org/10.1016/j.landusepol.2021.105823

Davis, J., Caskie, P., & Wallace, M. (2013). Promoting structural adjustment in agriculture: The economics of new entrant schemes for Farmers. *Food Policy*, 40, 90–96. https://doi.org/10.1016/j.foodpol.2013.02.006

Ekotoxa & Ireas (2016). Ex-post hodnocení Programu rozvoje venkova ČR za období 2007–2013: Závěrečná zpráva (MoA). Retrieved September 13, 2022, from https://eagri.cz/public/web/file/568806/Ex_post__PRV_2007_13_ZZ_final.pdf

European Court of Auditors (ECA) (2017). Podpora EU pro Mladé zemědělce by měla být lépe zacílena, aby usnadňovala účinnou generační obměnu. Zvláštní zpráva č. 10/2017: Mladí zemědělci. Retrieved September 17, 2022, from https://op.europa.eu/webpub/eca/special-reports/young-farmers-10-2017/cs/

Kazakopoulos, L., & Gidarakou, I. (2003). Young Women Farm Heads in Greek agriculture: Entering farming through policy incentives. *Journal of Rural Studies*, 19(4), 397–410. https://doi.org/10.1016/s0743-0167(03)00022-6

Ministry of Agriculture (MoA). (2021). O aplikaci Evidence zemědělských podnikatelů (eAGRI). Retrieved September 3, 2022, from https://eagri.cz/public/web/mze/farmar/EZP/

Ministry of Agriculture (MoA). (2022a). Výroční zpráva pro přímé platby za rok 2021 (Dotace, eAGRI). Retrieved September 23, 2022, from https://eagri.cz/public/web/mze/dotace/prime-platby/aktuality/vyrocni-zprava-pro-prime-platby-za-rok-2.html

Ministry of Agriculture (MoA). (2022b). Operace 6.1.1 Zahájení činnosti mladých zemědělců; Accepted applications from measures I.3.2 a 6.1.1 Starting a young farmers' business (Dotace, eAGRI). Retrieved September 20, 2022, Available from https://eagri.cz/public/web/mze/dotace/program-rozvoje-venkova-na-obdobi-2014/opatreni/m06-rozvoj-zemedelskych-podniku-a/x6-1-1-zahajeni-cinnosti-mladych/

Šimpach, O. (2017). Importance of young farmers in selected member states of European Union. In *Proceedings of the 10th International Scientific Conference RELIK* (pp. 446–453). Prague; Prague University of Economics and Business. ISBN 978-80-245-2238-8.

Šimpachová Pechrová, M. (2017). What is the motivation and barriers for young people to enter the agricultural sector? In *Proceedings of the 10th International Scientific Conference RELIK* (pp. 454–461). Prague; Prague University of Economics and Business.

Šimpachová Pechrová, M., & Šimpach, O. (2021). Generational change of managers in agricultural holdings. In *Proceedings of the 15th International Days of Statistics and Economics* (pp. 1059–1068). Prague; Prague University of Economics and Business.

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